

**What is claimed is:**

1. A heat conductive pipe comprising:
  - a base pipe allowing a liquid to flow through an interior thereof;
  - a plurality of axially extending grooves, formed parallel to a pipe axis in a row in a circumferential direction on an inner circumferential surface of the base pipe, having a cross section in a recess shape with a prescribed depth; and
  - a plurality of dividing walls formed between the axially extending grooves having a prescribed thickness.
2. A heat exchanger assembled with a heat conductive pipe,
  - said heat conductive pipe comprising:
    - the base pipe allowing the liquid to flow through the interior thereof;
    - the plurality of axially extending grooves, formed parallel to the pipe axis in a row in the circumferential direction, having the cross section in the recess shape with the prescribed depth; and
    - the plurality of dividing walls formed between the axially extending grooves having a prescribed thickness.
3. The heat conductive pipe according to claim 1, wherein the base pipe is formed with a long plate-shaped fin member extending in a direction of the pipe axis, and wherein a plurality of the axially extending grooves having the cross section in the recess shape with the prescribed depth are formed parallel to the pipe axis in a row on the surface of the plate-shaped fin member and the inner circumferential surface of the base pipe.
4. The heat exchanger assembled with the heat conductive pipe according to claim 2, wherein the long plate-shaped fin member extending in the direction of the pipe axis is formed in the base pipe, and wherein a plurality of the axially extending grooves having the cross section in the recess shape with the prescribed depth are formed parallel to the pipe axis in a row on the surface of the plate-shaped fin member and the inner circumferential surface of the base pipe.
5. The heat conductive pipe according to claim 1 or claim 3, wherein distance P between the centers of adjacent dividing walls of the axially extending grooves is defined from 0.2 to 2.0 mm, and depth H from the top of the dividing wall is defined from 0.5 P to 1.0 P mm.
6. The heat exchanger assembled with the heat conductive pipe according to claim 2 or claim 4, wherein distance P between the centers of adjacent dividing walls of the axially extending grooves is defined from 0.2 to 2.0 mm, and depth H from the top of the dividing wall is defined from 0.5 P to 1.0 P mm.
7. The heat conductive pipe according to claim 1, claim 3, or claim 5, wherein the bottom portion of the axially extending grooves, formed in a flat shape, is connected to the dividing wall via a corner portion.
8. The heat exchanger assembled with the heat conductive pipe according to claim 2, claim

4, or claim 6, wherein the bottom portion of the axially extending grooves, formed in the flat shape is connected to the dividing wall via a corner portion.

9. The heat conductive pipe according to claim 1, claim 3, or claim 5, wherein the bottom portion of the axially extending grooves, formed in a flat shape, is connected to the dividing wall via an arch portion.

10. The heat exchanger assembled with the heat conductive pipe according to claim 2, claim 4, or claim 6, wherein the bottom portion of the axially extending grooves, formed in a flat shape, is connected to the dividing wall via an arch portion.

11. The heat conductive pipe according to claim 1, claim 3, or claim 5, wherein the bottom portions of the axially extending grooves and the dividing walls are formed running in a circular shape.

12. The heat exchanger assembled with the heat conductive pipe according to claim 2, claim 4, or claim 6, wherein the bottom portions of the axially extending grooves and the dividing walls are formed running in the circular shape.

13. The heat conductive pipe according to claim 1 or claim 3, wherein one end of the plate-shaped fin member is connected to the inner circumferential surface of the base pipe and the other end thereof is protruded in the base pipe so as not to contact with the inner circumferential surface of the base pipe.

14. The heat exchanger assembled with the heat conductive pipe according to claim 4, wherein one end of the plate-shaped fin member is connected to the inner circumferential surface of the base pipe and the other end thereof is protruded in the base pipe so as not to contact with the inner circumferential surface of the base pipe.

15. The heat conductive pipe according to claim 3, wherein the plate-shaped fin members are formed to divide an inner space of the base pipe into a plural number.

16. The heat exchanger assembled with the heat conductive pipe according to claim 4, wherein the plate-shaped fin members are formed to divide the inner space of the base pipe into the plural number.

17. The heat conductive pipe according to claim 3, claim 13, or claim 15, wherein the plate-shaped fin member is formed by folding a plate member provided individually from the base pipe to form a connecting surface thereof being brazed or welded to the inner circumferential surface of the base pipe corresponding to the inner circumferential surface of the base pipe.

18. The heat exchanger assembled with the heat conductive pipe according to claim 4, claim 14, or claim 16, wherein the plate-shaped fin member is formed by folding the plate member provided separately from the base pipe to form the connecting surface thereof being brazed or welded to the inner circumferential surface of the base pipe corresponding to the inner

circumferential surface of the base pipe.

19. The heat conductive pipe according to claim 2, claim 13, or claim 15, wherein the plate-shaped fin member and the base pipe are formed in a united body in forming the base pipe.

20. The heat exchanger assembled with the heat conductive pipe according to claim 4, claim 14, or claim 16, wherein the plate-shaped fin member and the base pipe are formed in the united body in forming the base pipe.